

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-42 (canceled).

Claim 43 (currently amended): A modular construction system comprising:

~~an inventory a plurality of panel panels of various shapes and sizes that are derived from a common format, the format being a three-dimensional cube grid defined by twenty-seven sub-cubes within a single large cube, the sub-cubes having corners that form sixty-four vertices within the grid, wherein straight line radians are drawn between the sixty-four vertices to define fifty-nine two-dimensional plane shapes of three and four radian sides with corresponding three and four corners corresponding with the points of intersection of the radians, the two-dimensional plane shapes when projected into three-dimensional space become fifty-nine panel shapes having three and four sides with corresponding three and four corners, and a panel thickness which constitute an inventory of fifty-nine three-dimensional panels that may be joined to each other along their sides and corners to form complex structures;~~

a plurality of frame members attached along the sides of each of the panels, forming a framework around the perimeter of the panels to carry the weight of the panels and allow for connection to other panels;

at least one joinery system for connecting the sides and corners of two or more panels together to form a plurality of complex structures, wherein the at least one joinery system includes

at least one joining element attached to each frame member for connecting two or more panels together, a centerline element coincident with a longitudinal axis centered between the frame members of the panels and at least one span element for connecting the at least one joining element to the centerline element, wherein the at least one span element has an opening extending therethrough for accepting the centerline element therein and the at least one span element bridging an opening between the frame members and the centerline element of the panels being connected;

wherein the frame members of the panels being connected are spaced-apart from, parallel to and rotational about the centerline element, with at least two or more panels connected to and positioned at any dihedral angle with respect to each other and anywhere around the centerline element through 360 degrees.

Claim 44 (currently amended): The modular construction system of claim 43 wherein the panels are asymmetrical, wherein no two sides of have the same length.

Claim 45 (canceled).

Claim 46 (previously presented): The modular construction system of claim 43 wherein the panels are symmetrical, wherein all sides are of equal length or wherein pairs of parallel sides are of equal length.

Claim 47 (canceled).

Claim 48 (canceled).

Claim 49 (canceled).

Claim 50 (canceled).

Claim 51 (canceled).

Claim 52 (canceled).

Claim 53 (currently amended): The modular construction system of claim ~~52~~ 43 wherein ~~at least two~~ the panels being joined are joined at their corners about a common vertice where the common axes between the sides of the at least two panels being joined intersect.

Claim 54 (currently amended): The modular construction system of claim 53 wherein the ~~at least two~~ panels being joined at their corners converge from ~~at least 290~~ a plurality of different angles.

Claim 55 (canceled).

Claim 56 (canceled).

Claim 57 (canceled).

Claim 58 (canceled).

Claim 59 (currently amended): ~~The modular construction system of claim 57~~ A modular construction system comprising:

a plurality of panels of various shapes and sizes;

a plurality of frame members attached along the sides of each of the panels, forming a framework around the perimeter of each of the panels to carry the weight of the panels and allow for connection to other panels;

a first joinery system for connecting the sides of the panels together comprising at least one bracket perpendicularly attached to each frame member, the bracket having an opening extending therethrough for accepting a centerline element therein for connecting at least two panels together, wherein the at least one bracket is laterally adjustably positioned and attached perpendicular to the panel sides and bridge an opening between the ~~struts~~ frame members and centerline element;

a second joinery system for connecting the corners of the panels together comprising at least one web horizontally attached to the frame members, at least one collar having an opening extending therethrough, at least one tab extension extending from one side of the collar that attaches to the web with fasteners, and a centerline element that extends through the opening in the collar for connecting a plurality of panels together, wherein the panels being joined at their corners converge from a plurality of different angles about a common vertice;

wherein the frame members of the panels being connected are spaced-apart from, parallel to and rotational about the centerline element, with at least two or more panels connected to and positioned at any dihedral angle with respect to each other and anywhere around the centerline element through 360 degrees.

Claim 60 (currently amended): The modular construction system of claim 59 wherein the opening between the ~~struts~~ frame members and the centerline element allows for placement of service and utility lines and connection boxes.

Claim 61 (currently amended): The modular construction system of claim ~~57~~ 59 wherein the ~~eylindrieal~~ centerline element is hollow allowing for the passage of service and utility lines therethrough.

Claim 62 (canceled).

Claim 63 (canceled).

Claim 64 (canceled).

Claim 65 (currently amended): The modular construction system of claim ~~56~~ 59 further comprising an opening between the panel corners and the ~~eylindrieal~~ centerline element of the panels being joined about a common vertice for the placement of service and utility lines through any given vertice about which a plurality of panels are joined.

Claim 66 (currently amended): The modular construction system of claim ~~56~~ 59 wherein the ~~eylindrieal~~ centerline element is ~~open-ended and~~ hollow allowing for the passage of service and utility lines through ~~the joinery of panels~~ at the vertice.

Claim 67 (currently amended): The modular construction system of claim 65 wherein the opening ~~at the vertice~~ allows for placement of a connecting node of a conventional space frame construction system including projecting spokes that are inserted into the ~~eylindrieal~~ centerline elements element which is anchored to the web by ~~means of the~~ collars, ~~in turn~~ attached to the ~~centerlines of panel corners effects~~ centerline element to effect the joinery of an assemblage of

panels ~~of the panel inventory~~ about a given vertice to a conventional strut-node space frame construction system.

Claim 68 (currently amended): The modular construction system of claim 65 wherein the opening ~~at the vertice~~ allows for the passage of structural bars anchored to and extending from conventional materials, through the joinery of assemblages at the panel corners, to be inserted into the ~~cylindrical~~ centerline elements element nearest the vertice, ~~which~~ anchored to ~~webs~~ the web, which in turn is anchored to the panel corners ~~effecting a~~ to effect the joinery of ~~an assemblage of~~ panels ~~from the panel inventory~~ to conventional construction materials and systems.